Data Source: **EM CDB** Report Number: GEN-01b

Operations/Field Office: Oakland Print Date: 3/9/2000

HQ ID: 0269 Site Summary Level: Geothermal Test Facility

Project **OK-011 / Soil Remediation (GTF)**

General Project Information

Project Description Narratives

Purpose, Scope, and Technical Approach:

Definition of Scope: Restoration of the brine pond at GTF included the following work. Execution of the Brine Pond Closure Plan to remove and dispose of approximately 16,000 CY of contaminated earth and the pond liner from the six acre brine pond area. Removal of the contaminated brine material and sand in such a manor as to minimize the disbursement of dust. The waste material consisted of approximately 2,000 TN of hazardous waste with naturally occurring radioactive material (NORM) and approximately 20,000 TN of non-hazardous waste with NORM. This waste was disposed of at an offsite approved disposal facility. In addition, all piping and appurtenances leading to the brine pond were dismantled and disposed. The restoration contractor performed confirmation analysis on the brine pond after completion of restoration activities. Finally, a closure report was prepared to obtain closure of the brine pond from the California Regional Water Quality Control Board (CRWQCB) and the site was released for unrestricted use.

Technical Approach: The brine pond remedial work was divided into two phases. Phase I work included planning and conducting a remedial investigation to characterize the nature of residues within the brine pond. A limited feasibility study was also performed during this phase. Phase II involved implementation of the remedial alternative, excavation of the waste material from the brine pond and disposal of the debris at an offsite commercial disposal facility. Cleanup was completed utilizing existing excavation technologies.

Project Status in FY 2006:

The remediation of the Brine pond at GTF was completed in 1997. Therefore the project end state was achieved prior to FY 2006. The end state consists of:

- a. Removal and disposal of the brine pond waste material from the pond area including appurtenances leading to the brine pond.
- b. Confirmation analysis that the site is clean and a closure report to allow release of the site to the Bureau of Land Management.
- c. Regrading of the brine pond site.

Post-2006 Project Scope:

The remediation of the Brine pond at GTF was completed in 1997.

Project End State

No active processes or experiments involving DOE research are currently operating or planned at the GTF. The DOE Office of Environmental Management's has completed its mission such that the site landlord, the Office of Energy Efficiency, may transfer the facility to the U.S. Bureau of Land Management for their unrestricted use. All buildings on the site have been demolished. The site is being returned to the Bureau of Land Management in the same condition as it was received by DOE. It is anticipated this area will be reserved as a wildlife area. Approximately 2,000 TN of hazardous waste with naturally occurring radioactive material (NORM) and approximately 20,000 TN of non-hazardous waste with NORM was removed and disposed at a permitted off-site facility.

Cost Baseline Comments:

Dataset Name: FY 1999 Planning Data Page 1 of 7

Data Source: **EM CDB** Report Number: GEN-01b

Operations/Field Office: Oakland Print Date: 3/9/2000

HQ ID: 0269 Site Summary Level: **Geothermal Test Facility**

Project OK-011 / Soil Remediation (GTF)

Project Description Narratives

The cost estimate was based on Activity-Based Cost Estimating. The costs were independently verified, and the final budget was negotiated.

Safety & Health Hazards:

N/A-The project is complete.

Safety & Health Work Performance:

N/A-The project is complete.

PBS Comments:

The GTF is an 82 acre site located in the Imperial Valley area of Imperial County California. On the site, DOE ER is responsible for remediation of the 6 acre brine pond. All other facilities are the responsibility of the site landlord DOE Energy Efficiency (EE). No active processes or experiments involving DOE research are currently operating or planned at the GTF. Sources of contamination are related to past operations. The Environmental Restoration program has completed the cleanup of the brine pond, and the site has been returned to the Office of Energy Efficiency for their turnover to the U.S. Bureau of Land Management for their unrestricted use. In accordance with the Memorandum of Agreement between the Office of Energy Efficiency and the Office of Environmental Management, site restoration activities were completed in FY 1997.

Baseline Validation Narrative:

An indepedent government estimate was prepared by DOE/OAK prior to award of the contract. This estimate was used to negotiate the contract with the contractor selected. The estimate prepared was based on activity based costing.

General PBS Information

Project Validated? Yes Date Validated: 6/1/1996

Nο Has Headquarters reviewed and approved project?

12/1/1997 **Date Project was Added: Baseline Submission Date:** 7/13/1999

FEDPLAN Project? No

DNFSB AEA Drivers: CERCLA RCRA UMTRCA State **DOE Orders** Other Ν Ν N N Y Y Y N

Project Identification Information

DOE Project Manager: Hemant Patel

DOE Project Manager Phone Number: 510-637-1568

Page 2 of 7 Dataset Name: FY 1999 Planning Data

Data Source: EM CDB Report Number: GEN-01b

Operations/Field Office: Oakland

Print Date: 3/9/2000

Site Summary Level: Geothermal Test Facility

HQ ID: 0269

Project OK-011 / Soil Remediation (GTF)

General PBS Information

DOE Project Manager Fax Number: 510-637-2031

DOE Project Manager e-mail address: hemant.patel@oak.doe.gov

Is this a High Visibility Project (Y/N):

Planning Section

Baseline Costs (in thousands of dollars)

	1997-2006 Total	2007-2070 Total	1997-2070 Total	1997	Actual 1997	1998	Actual 1998	1999	2000	2001	2002	2003	2004	2005	2006
PBS Baseline (current year dollars)	1,300	0	1,300	1,300	1,069				0	0	0	0	0	0	0
PBS Baseline (constant 1999 dollars)	1,300	0	1,300	1,300	1,069				0	0	0	0	0	0	0
PBS EM Baseline (current year dollars)	1,300	0	1,300	1,300	1,069				0	0	0	0	0	0	0
PBS EM Baseline (constant 1999 dollars)	1,300	0	1,300	1,300	1,069				0	0	0	0	0	0	0
	2007	2008	2009 2010	2011- 2015	2016- 2020	2021- 2025	2026- 2030	2031- 2035	2036- 2040	2041- 2045	2046- 2050	2051- 2055	2056- 2060	2061- 2065	2066- 2070
PBS Baseline (current year dollars)	0	0	0 0	0	0	0	0	0	0	0	0	0	0	0	0
PBS Baseline (constant 1999 dollars)	0	0	0 0	0	0	0	0	0	0	0	0	0	0	0	0
PBS EM Baseline (current year dollars)	0	0	0 0	0	0	0	0	0	0	0	0	0	0	0	0

Dataset Name: FY 1999 Planning Data Page 3 of 7

Data Source: EM CDB Report Number: GEN-01b

Operations/Field Office: Oakland

Print Date: 3/9/2000

Site Summary Level: Geothermal Test Facility

HQ ID: 0269

Project OK-011 / Soil Remediation (GTF)

	2007	2008	2009	2010				026- 030 20			2046- 2050	2051- 2055	2056- 2060	2061- 2065	2066- 2070
PBS EM Baseline (constant 1999 dollars)	0	0	0	0	0	0	0	0	0	0	0	0 0	0	0	
Baseline Escalation	n Rates														
	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009		
	0.00%			2.70%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%		
	2010	2011-2015	2016-2020	2021-2025	2026-2030	2031-2035	2036-2040	2041-2045	2046-2050	2051-2055	2056-2060	2061-2065	2066-2070		
	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%		

Project Reconciliation

Project Completion Date Changes:

Previously Projected End Date of Project: 12/1/1996 **Current Projected End Date of Project:** 12/1/1996

Explanation of Project Completion Date Difference (if applicable):

Project Cost Estimates (in thousands of dollars)

Previously Estimated Lifecycle Cost (1997 - 2070, 1998 Dollars): 1,335 **Actual 1997 Cost:** 1,069 **Actual 1998 Cost:**

Previously Estimated Lifecycle Cost of Project (1999 - 2070, 1998 Dollars): 266 Inflation Adjustment (2.7% to convert 1998 to 1999 dollars):

Previously Estimated Lifecycle Cost (1999 - 2070, 1999 Dollars): 273

Project Cost Changes

Cost Adjustments Reconciliation Narratives

Dataset Name: FY 1999 Planning Data Page 4 of 7

Data Source: **EM CDB** Report Number: GEN-01b

Operations/Field Office: Oakland Print Date: 3/9/2000

Site Summary Level: Geothermal Test Facility HQ ID: 0269

Project OK-011 / Soil Remediation (GTF)

Project Reconciliation

Cost Change Due to Scope Deletions (-):

273 Negotiated good waste disposal rate, reduced schedule from 3 years to 1 year, adjusted grade contour **Cost Reductions Due to Efficiencies (-):**

0

Cost Associated with New Scope (+):

Cost Growth Associated with Scope Previously Reported (+):

Cost Reductions Due to Science & Technology Efficiencies (-):

Subtotal: 0

Additional Amount to Reconcile (+): 0

Current Estimated Lifecycle Cost (1999 - 2070, 1999 Dollars):

Milestones

Milestone/Activity	Field Milestone Code	Original Date	Baseline Date	Legal Date	Forecast Date	Actual Date	EA	DNFSB	Mgmt. Commit.	Key Decision	Intersite
Begin Brine Pond Remediation	OK-011-01		9/1/1996	9/1/1996			Y				
Complete Brine Pond Restoration	OK-011-02		11/1/1996	11/1/1996			Y				
Workplan Brine Pond	OK-011-03		8/1/1996	8/1/1996			Y				
Closure Report	OK-011-04		12/1/1996	12/1/1996			Y				

Milestones - Part II

Milestone/Activity	Field Milestone Code	Critical Decision	Critial Closure Path	Project Start	Project End	Mission Complete	Tech Risk	Work Scope Risk	Intersite Risk	Cancelled	Milestone Description
Begin Brine Pond Remediation	OK-011-01		Y	Y			1	1	1		Start remediation of brine pond.
Complete Brine Pond Restoration	OK-011-02		Y				1	1	1		Complete phisical cleanup of brine pond.
Workplan Brine Pond	OK-011-03						1	1	1		Final workplan for brine pond restoration.
Closure Report	OK-011-04		Y		Y	Y	1	1	1		Submit final brine pond closure report.

Dataset Name: FY 1999 Planning Data

Data Source: EM CDB Report Number: GEN-01b

Operations/Field Office: Oakland Print Date: 3/9/2000

Site Summary Level: Geothermal Test Facility

HQ ID: 0269

Project OK-011 / Soil Remediation (GTF)

Performance Measur	re Metrics													
Category/Subcategory	Units	1997-2006 Total	2007-2070 Total	1997-2070 Total	Actual Pre-1997	Planned 1997	Actual 1997	Planned 1998	Planned 1999	Planned 2000	Planned 2001	Planned 2002	Planned 2003	Planne 200
RS														
Assess.	NR	0.00	0.00	0.00	2.00									
RS														
Cleanup	NR	0.00	0.00	0.00			2.00							
Category/Subcategory	Units	Planne 200				Planned 2008	Planned 2009			- 20	16 - 20	021 - 2		anned 2031 - 2035
RS														
Assess.	NR													
RS														
Cleanup	NR													
Category/Subcategory	Units	Planne 2036 204	- 2041 -	2046 -	2051 -	Planned 2056 - 2060	Planned 2061 - 2035	2066	- •	•	cle otal			
RS														
Assess. RS	NR									2	.00			
Cleanup	NR									2	.00			
Release Sites						Planned	Forecast	Actual	Planned Fo	recast A	ctual Ac			
Site RSF Chang Code ID Flag	e Description	o n		Class/	Subclass Name	Assess. Year	Assess. Year		Comp. C	omp. C	omp. Ye Oate		Comp. Status	RAD
GETF 0001	Brine Pon	d		Impou	Surface ndments/Evapor nds / Pits	1992 at		8/1/1992	2000	11/	15/199 6	N	Approved	Y
GETF 0007	Spray Pon	d		Liquid	Surface	1993		6/1/1993	2000	10/3	30/199	N	Approved	N

Dataset Name: FY 1999 Planning Data

Date of Dataset: 9/20/1999

T 1 1/// I lamining Dat

Report Number: Data Source: **EM CDB** GEN-01b

Operations/Field Office: Oakland Print Date: 3/9/2000

Site Summary Level: Geothermal Test Facility HQ ID: 0269

Project OK-011 / Soil Remediation (GTF)

Flag

Release Sites

ID

Code

Planned Forecast Actual Planned Forecast Actual Acc. Change Description Site RSF Class/Subclass Name Assess. Assess. Comp. Comp. Comp. Year No Comp. RAD Assess. Year

Year

Date

Year

Year

Date

6

Status

Action

Impoundments/Holding

Ponds

Dataset Name: FY 1999 Planning Data Page 7 of 7